

JANUARY 2005 04.01.05

PA 1247027

THE UNITED STATES OF AMERICA**TO ALL TO WHOM THESE PRESENTS SHALL COME;****UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office****December 02, 2004**

**THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM
THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK
OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT
APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A
FILING DATE UNDER 35 USC 111.**

APPLICATION NUMBER: 60/517,032**FILING DATE: November 04, 2003**

**By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS**



M. K. Hawkins
M. K. HAWKINS

Certifying Officer**BEST AVAILABLE COPY**

16076 U.S. PTO

Please type a plus sign (+) inside this box



PTO/SB/18 (5-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

INVENTOR(S)					
Given Name (first and middle (if any))		Family Name or Surname		Residence (City and either State or Foreign Country)	
Robert B.		Mooney		Farmington Hills, MI	
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
PANORANIC RETRACTABLE TOP					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number 28886 <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;">Place Customer Number Bar Code Label here</div>					
OR Type Customer Number here					
<input checked="" type="checkbox"/> Firm or Individual Name Kevin S. MacKenzie					
Address Clark Hill PLC					
Address 500 Woodward Avenue, Suite 3500					
City Detroit		State MI		ZIP 48226-3435	
Country US		Telephone 313-965-8300		Fax 313-965-8252	
ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages 3		<input type="checkbox"/> CD(s), Number 			
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets 10		<input type="checkbox"/> Other (specify) 			
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)					
<input type="checkbox"/> A check or money order is enclosed to cover the filing fees					
<input checked="" type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number 50-1759 <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-left: 20px;">FILING FEE AMOUNT (\$) \$160.00</div>					
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted,

SIGNATURE

Kevin S. MacKenzie

TYPED or PRINTED NAME Kevin S. MacKenzie

TELEPHONE

313-965-8300

Date

11/04/2003

REGISTRATION NO.

45,639

(if appropriate)

Docket Number:

19339-095692

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

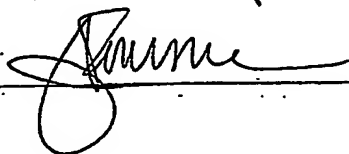
This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

CERTIFICATE OF MAILING BY EXPRESS MAIL

EXPRESS MAIL MAILING LABEL NO. EL 962720863 US

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on November 3, 2003, 2003 and is addressed to: Mail Stop Provisional, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450

By: _____

A handwritten signature in dark ink, appearing to be "J. M. Smith", written over a horizontal line.

Attorney Docket No : 19339-095692

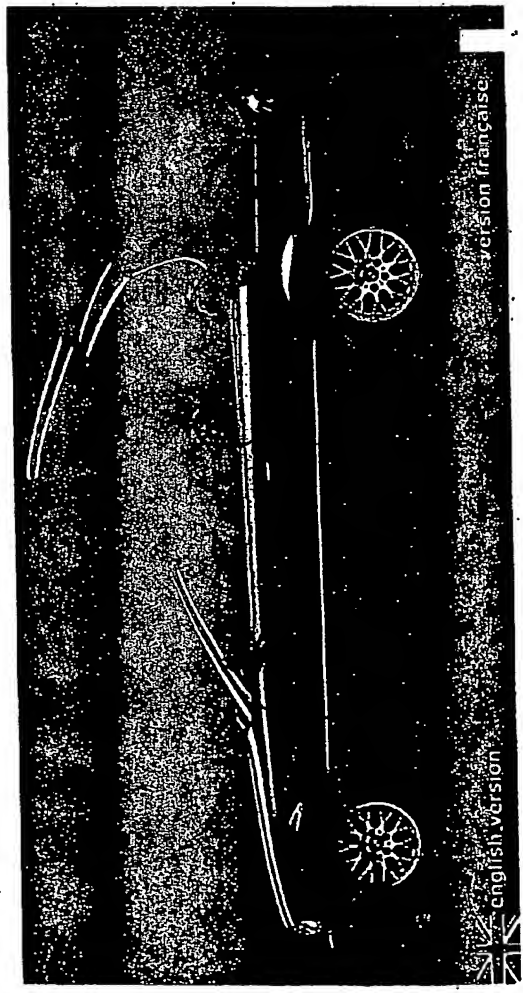
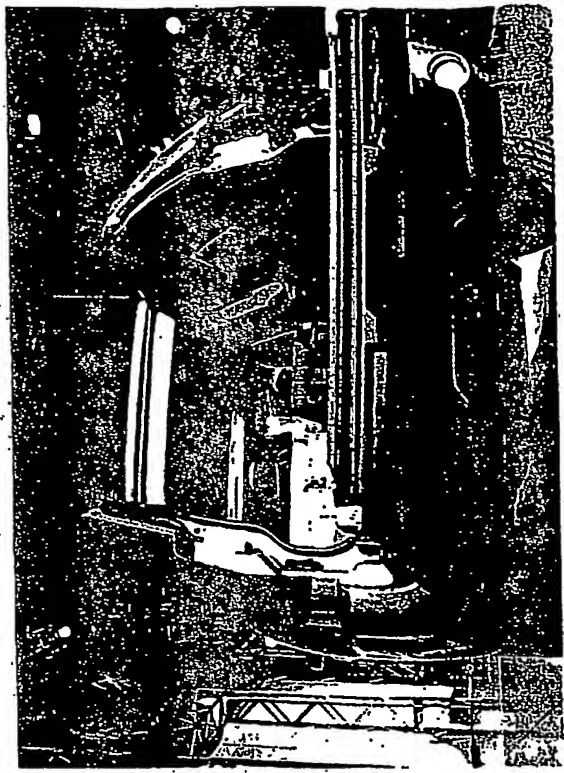
INTICOR

**Panoramic Retractable Top
For Legal Office
10/21/03**

Shaping the inner dimension™

- First to market
 - with Sunroof function AND full open air retraction for Sedan (4 door) vehicles
- Minimal panel packaging / storage size into trunk during and after retraction due to unique kinematics
- All glass modular roof
 - Laminated glass for reduced NVH
 - Glass laminations to provide variable optic effects
- Full size back seat
 - No infringement into rear seating
- Decklid opening not required during panel kinematics
- Security of a hard top, with sunroof & full open air options
- Motor and actuator driven system
- Maintains base car performance requirements
 - Torsional; Roof crush; Side impact; Head impact, etc.

Sliding Roof System Benchmarks



version française

english version

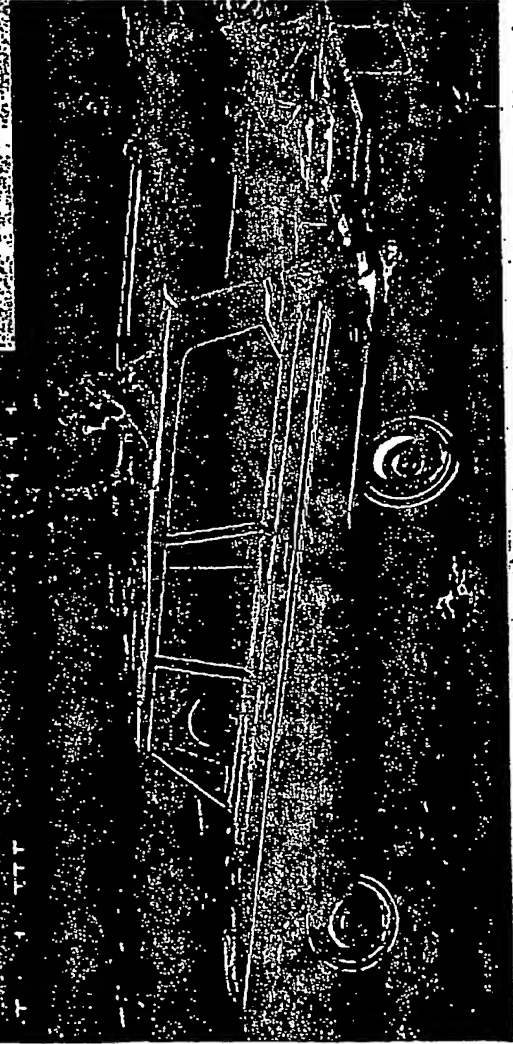
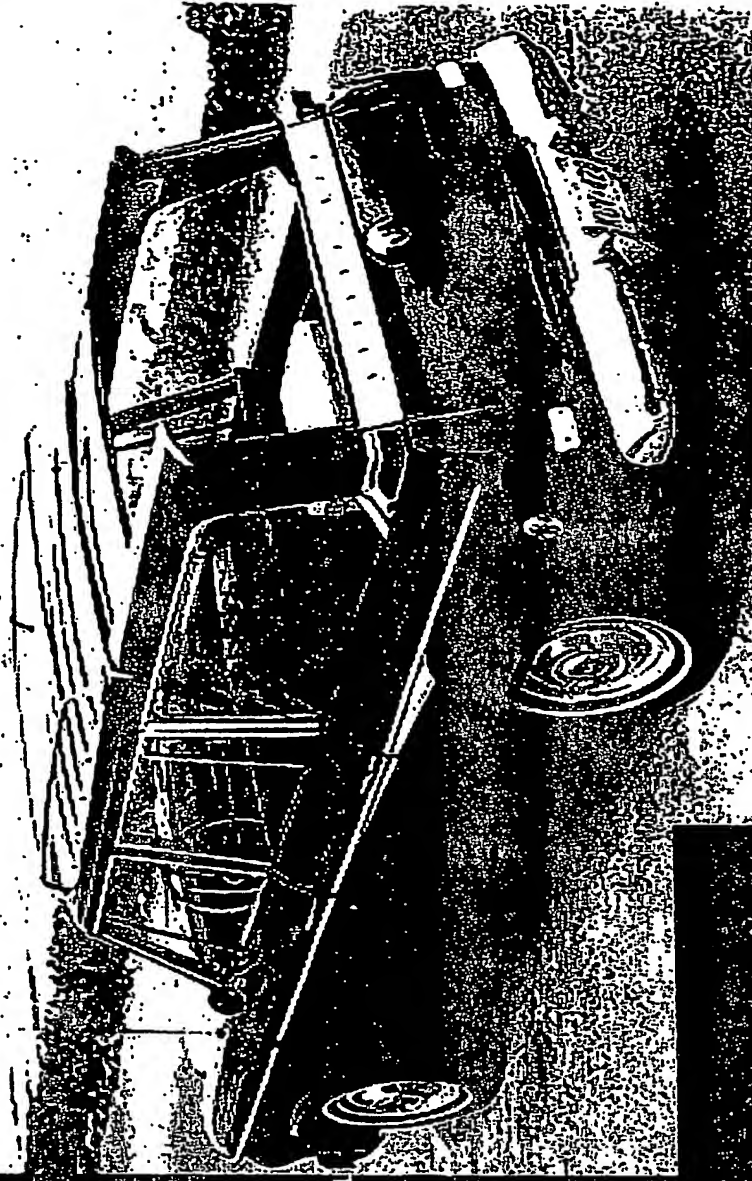
Retractable

Sliding Roof

INTIER

1964 Studebaker Lark Station Wagon

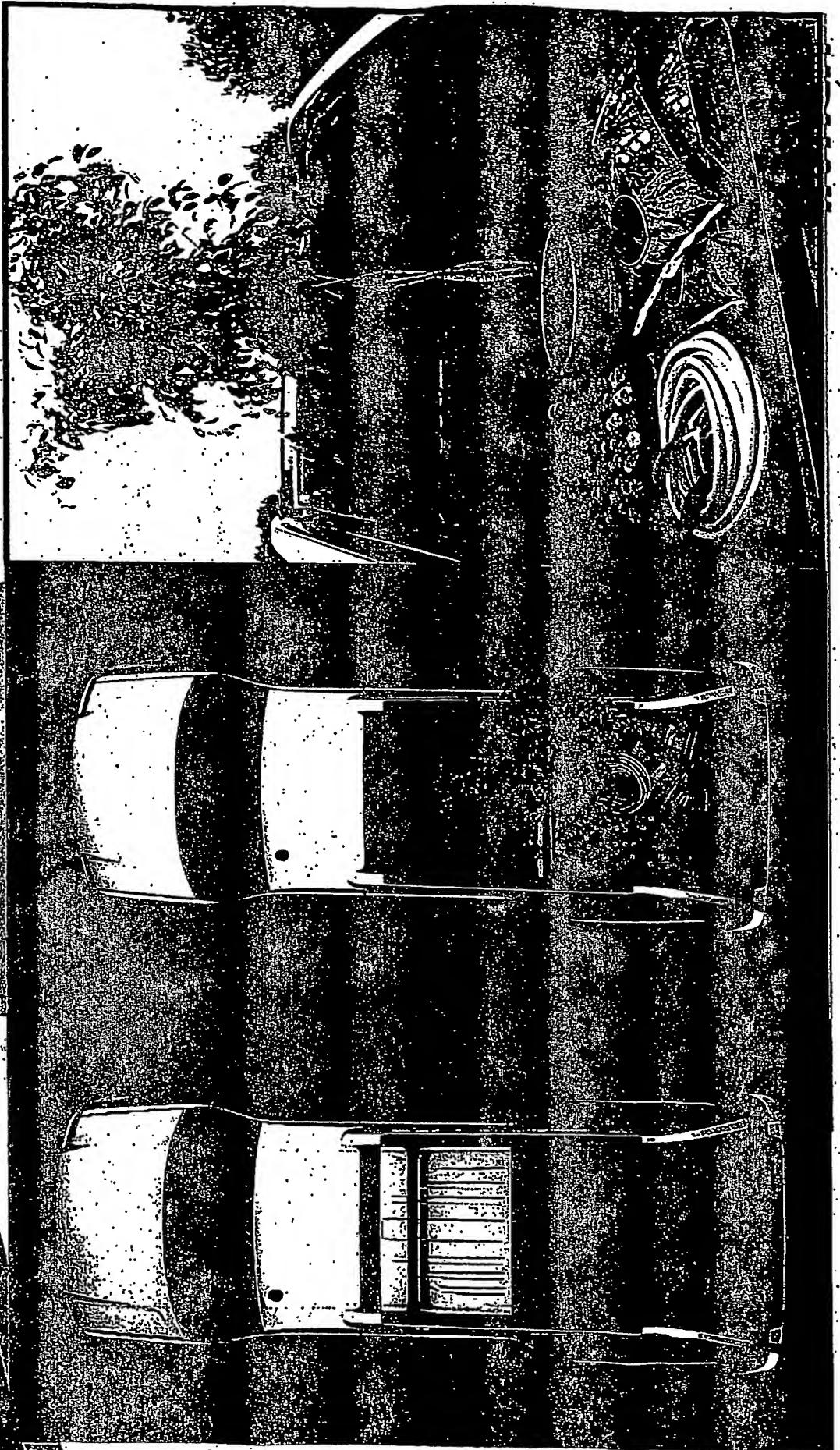
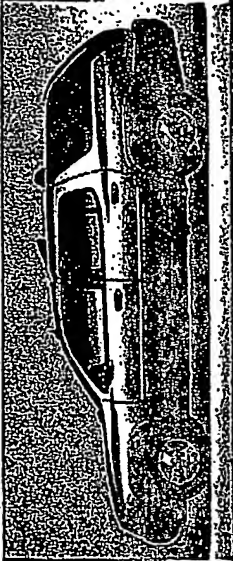
the Lark Station Wagon for 1964. It was now called Wagoneer and featured a retractable sliding roof above the cargo compartment. This enhanced practicality and Studebaker advertised it as "a family car, a functional utility wagon and a fun-filled convertible." The tailgate was changed into a two-piece lid with a fold-down rear window.



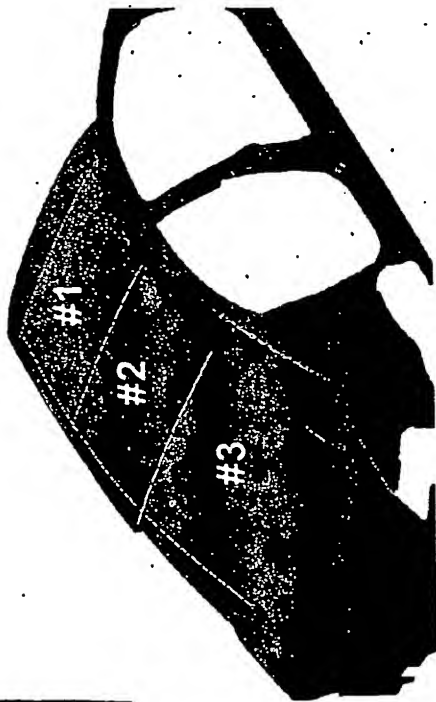
**"What was old is
new again"**

INTIER

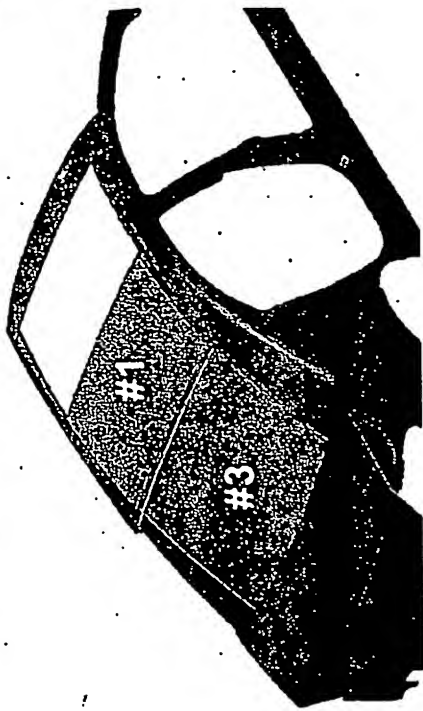
2004 GMC Envoy XUV



Intier panel movement stages



1) All panels closed



2) Sunroof function - #1 slides over #2



3) #3 unlocks and rotates out and then #1 & 2 slide under #3



4) Package tray swings up and then #1 & 2 & 3 all rotate into trunk **INTER** and package tray returns



Panel 1 retracted
over Panel 2
(sunroof function)

Panel 3

Panel 2

Decklid

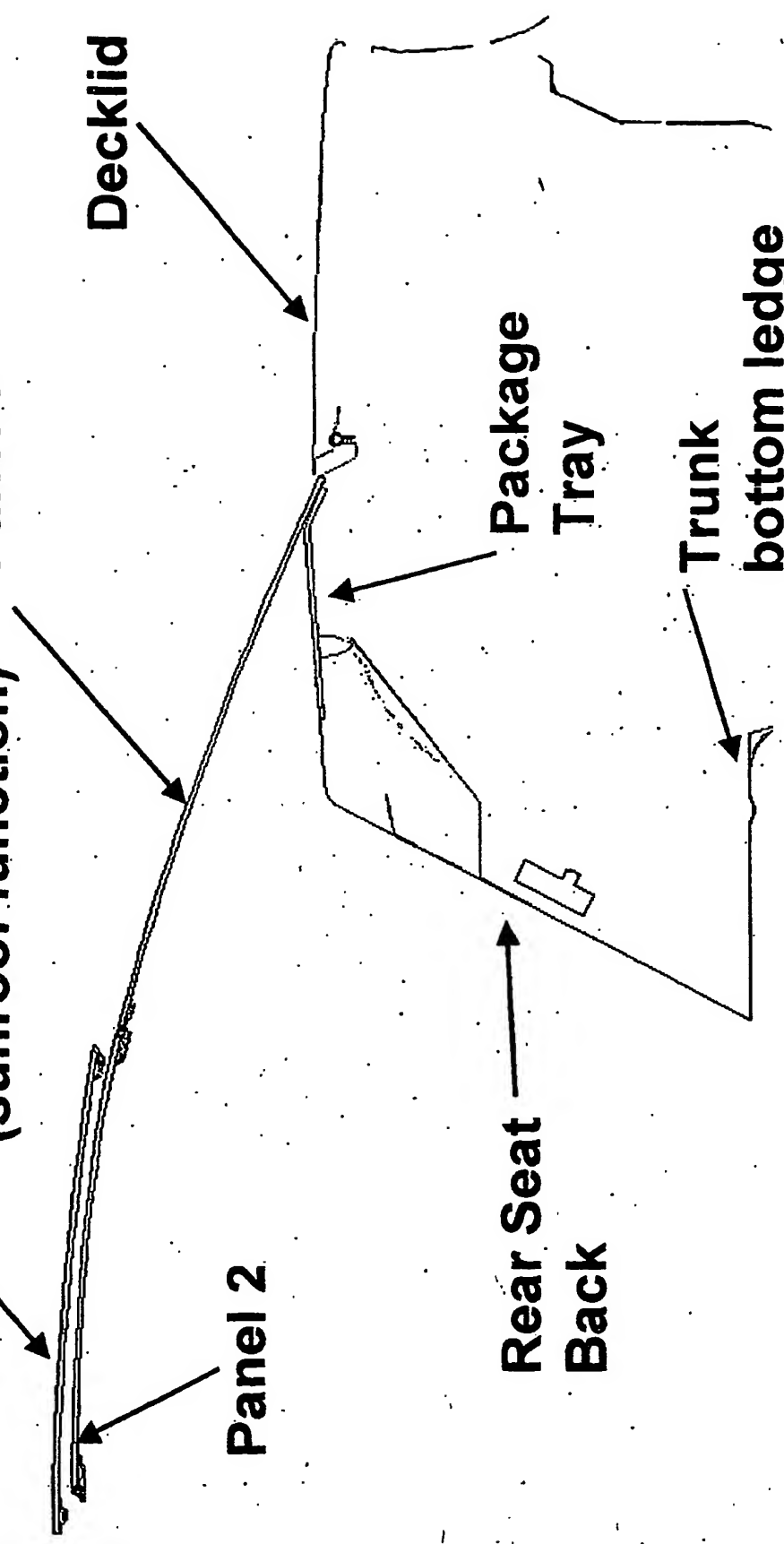
Package
Tray

Rear Seat
Back

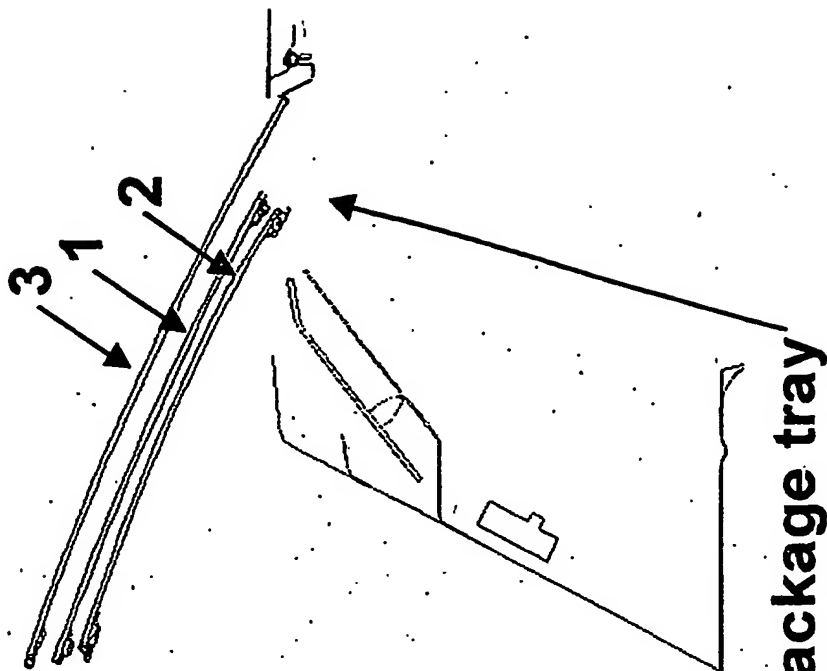
Trunk
bottom ledge

Centerline Section

INTER



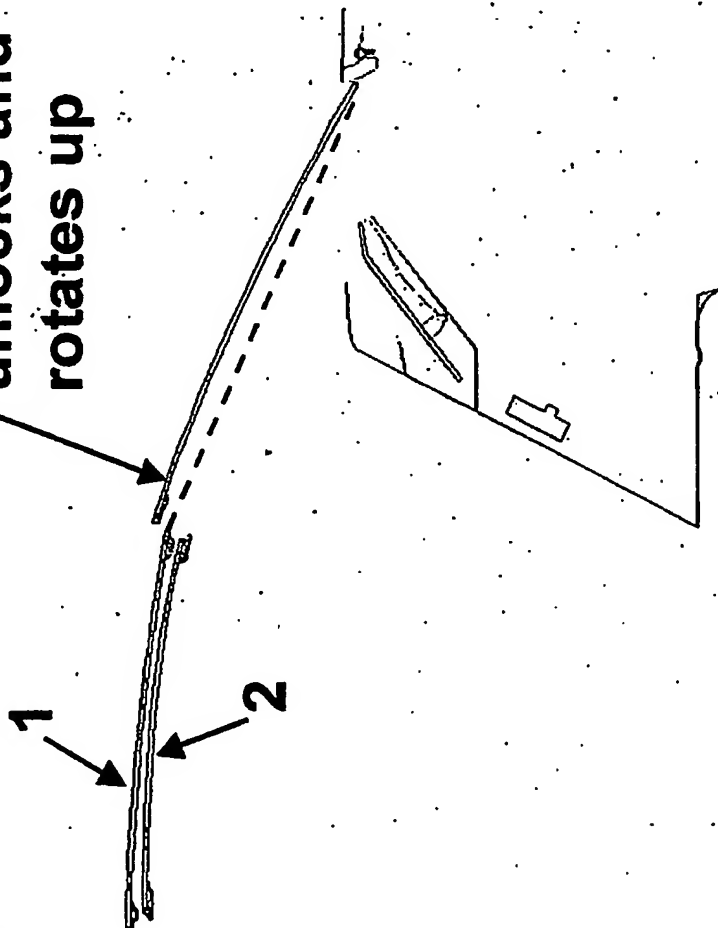
Panels 1&2
slide under
Panel 3



Package tray
rotates down

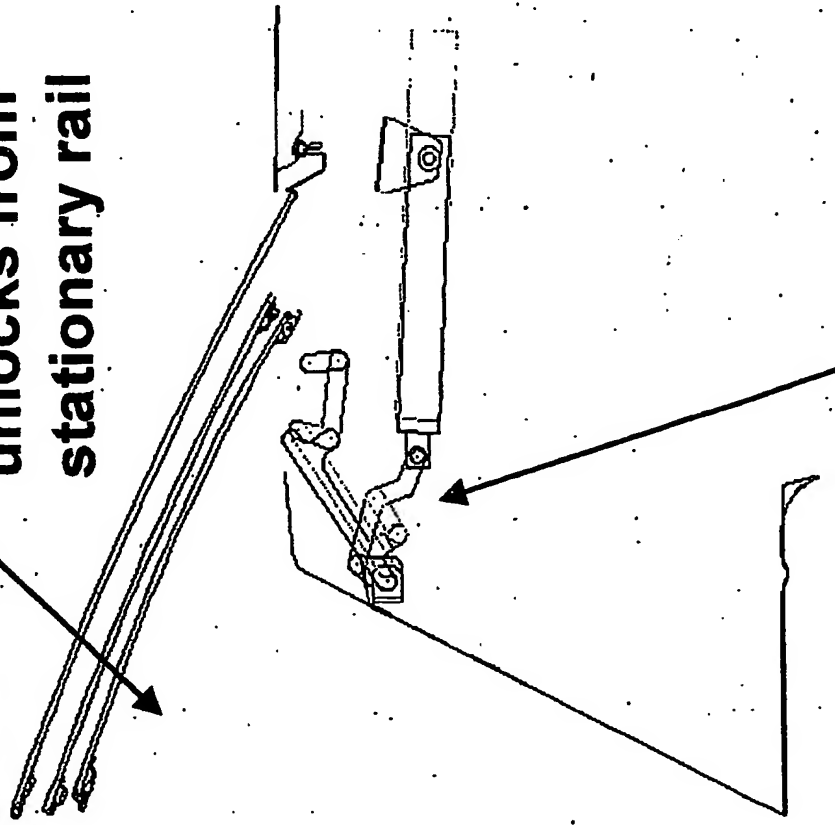
INTER

Panel 3
unlocks and
rotates up



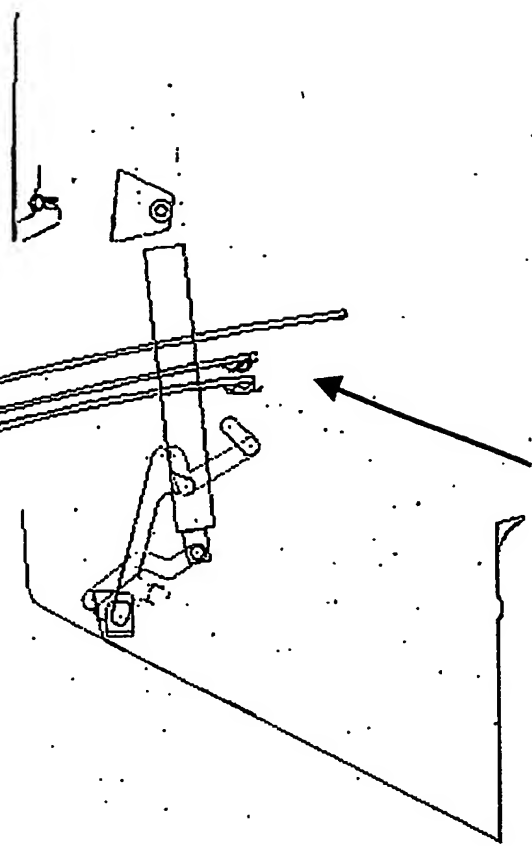
How the 3 panels retract

**Rear rail
unlocks from
stationary rail**



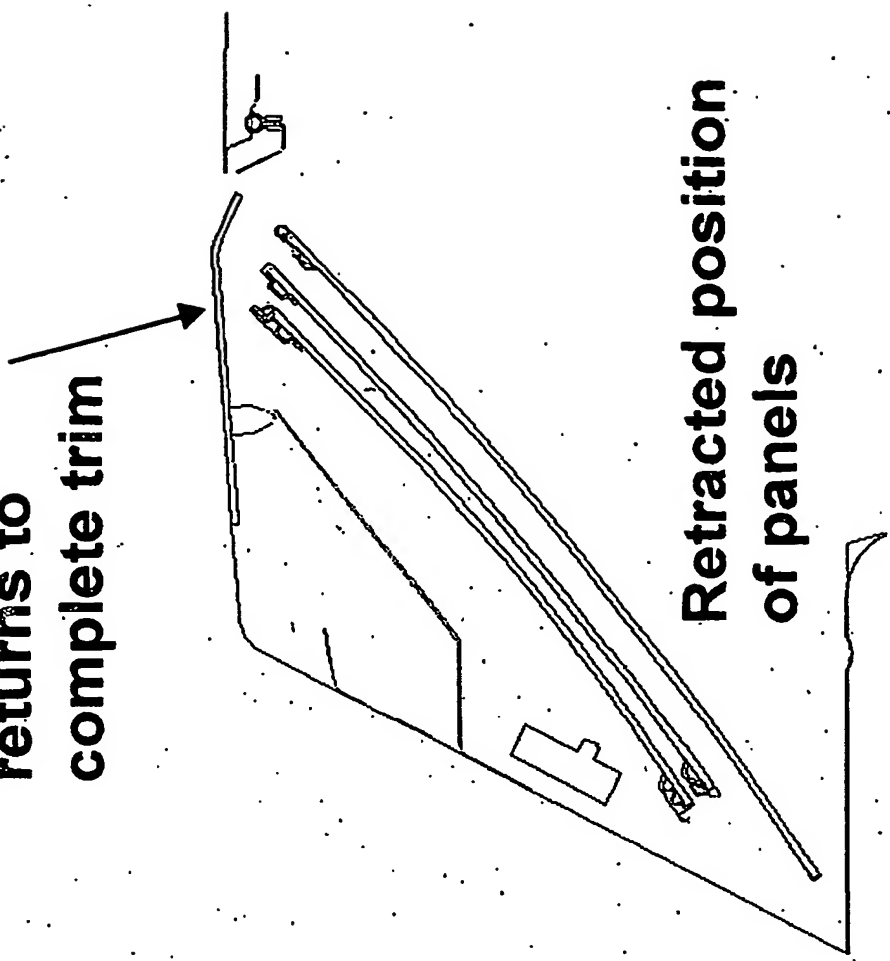
**3 panels rotate
together**

INTER

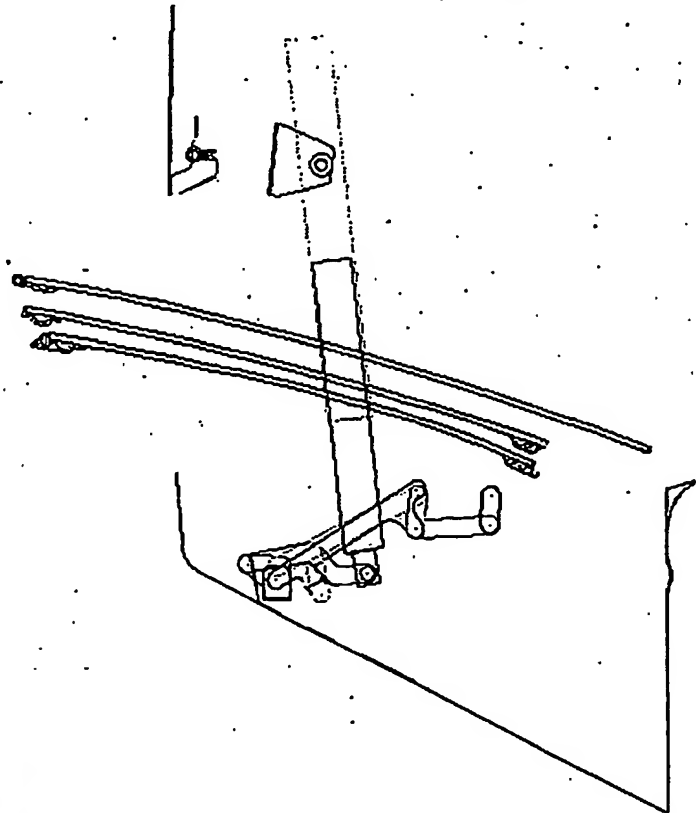


How the 3 panels retract

Package tray
returns to
complete trim



Retractable mechanism
rotate panels with very
limited intrusion into trunk



Retractable Hard Top Systems

No integrated
sunroof function

Decklid kinematics
required

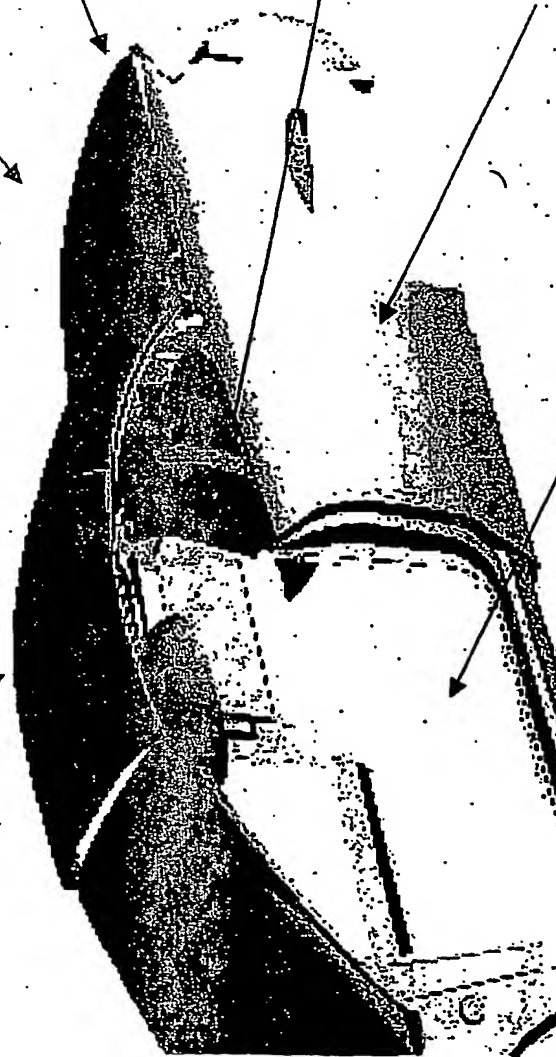
Limited or no
trunk space

Limited or no
back seating

Hydraulically
driven

Coupes only

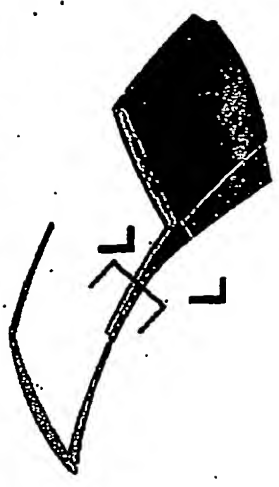
Double click on car for top kinematics



INTER

Panel #1 retracted

2



Panel 1

Panel 2

Panel 1
glass reinf

Seal

Fixed close
out panel

Panel #2
mechanism

Panel 1 cable

Panel #1
mechanism

Water management

Mounting to
body structure

Section LL

3

Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/CA04/001919

International filing date: 04 November 2004 (04.11.2004)

Document type: Certified copy of priority document

Document details: Country/Office: US
Number: 60/517,032
Filing date: 04 November 2003 (04.11.2003)

Date of receipt at the International Bureau: 23 February 2005 (23.02.2005)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☒ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☒ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.